6. (Amended) A data compression method as claimed in claim 1, wherein the first coding method is any one of Huffman coding, run length coding, B1 coding, B2 coding, Wyle coding, Golomb coding, Golomb-Rice coding, and binary arithmetic coding.

7. (Amended) A data compression method as claimed in claim 1, wherein the second coding method is any one of Huffman coding, universal coding, and multi-valued arithmetic coding.

8. (Amended) A data compression method as claimed in claim 1, wherein the coded data are obtained by coding the classified data according to a third coding method, out of the classification information data and/or the data having the representative value and the classified data, in the case where the amount of the coded data is larger than a predetermined information amount determined based on the original data.

9. (Amended) A data compression method as claimed in claim 1, wherein the third coding method is any one of Huffman coding, arithmetic coding, and PCM coding.

14. (Amended) A data compression apparatus as claimed in claim 10, wherein the classification means classifies the quantized data by letting the data having the representative value be 0 data representing the value of 0 of the quantized data and letting the classified data be non-zero data representing a non-zero value of the quantized data.

15. (Amended) A data compression apparatus as claimed in claim 10, further comprising:

judging means for judging whether or not the amount of the coded data is larger than a

predetermined information amount determined based on the original data; and

third coding means for obtaining the coded data by coding at least the classified data

according to a third compression method, out of the classification information data and/or the

data having the representative value and the classified data, in the case where the judging means

has judged the amount of the coded data to be larger than the predetermined information amount.

20. (Amended)   A computer-readable recording medium as claimed in claim 16,

wherein the procedure of classification is a procedure of classifying the quantized data by letting

the data having the representative value be 0 data representing the value 0 of the quantized data,

and by letting the classified data be non-zero data representing a non-zero value of the quantized

data.

21. (Amended)   A computer-readable recording medium as claimed in claim 16,

the program further including the procedures of:

judgment as to whether or not the amount of the coded data is larger than a predetermined

information amount determined based on the original data; and

acquisition of the coded data by coding at least the classified data according to a third

compression method out of the classification information data and/or the data having the

representative value and the classified data, in the case where the amount of the coded data has

been judged to be larger than the predetermined information amount.

Please add the following new claims 22-30:

22. (New) The data compression method of claim 1, wherein said classification information data comprises a comparatively small information amount.

23. (New) The data compression method of claim 22, wherein said classification information data comprises 3-valued data.

24. (New) The data compression method of claim 22, wherein said classification information data comprises binary data.

25. (New) The data compression apparatus of claim 10, wherein said classification information data comprises a comparatively small information amount.

26. (New) The data compression method of claim 25, wherein said classification information data comprises 3-valued data.

27. (New) The data compression method of claim 25, wherein said classification information data comprises binary data.

28. (New) The computer-readable recording medium of claim 16, wherein said classification information data comprises a comparatively small information amount.

29. (New) The computer-readable recording medium of claim 28, wherein said classification information data comprises 3-valued data.

30. (New) The computer-readable recording medium of claim 28, wherein said classification information data comprises binary data.